

IN THE CLAIMS

Please amend claims 1, 2, 5-7, 22, and 23 as follows.

C3
1. (Amended) An isolated corynebacterial polynucleotide comprising a polynucleotide sequence selected from the group consisting of:

a) a polynucleotide that is at least 70% identical to a polynucleotide encoding a polypeptide containing the amino acid sequence of SEQ ID NO : 2, the polypeptide having phosphoglycerate mutase activity.

b) a polynucleotide encoding a polypeptide containing an amino acid sequence which is at least 70% identical to the amino acid sequence of SEQ ID NO : 2, the polypeptide having phosphoglycerate mutase activity,

c) a polynucleotide that is complementary to the polynucleotides of a), or b), and

d) a polynucleotide containing at least 15 consecutive bases of the polynucleotide sequence of a), b) or c), the polynucleotide encoding a polypeptide having phosphoglycerate mutase activity.

2. (Amended) The polynucleotide according to Claim 1 which is a DNA that replicates in corynebacterial host cells.

C4
5. (Amended) An isolated corynebacterial polynucleotide comprising a polynucleotide sequence selected from the group consisting of:

a) a polynucleotide that is at least 70% identical to a polynucleotide encoding a polypeptide containing the amino acid sequence of SEQ ID NO : 2, the polypeptide having phosphoglycerate mutase activity,

b) a polynucleotide encoding a polypeptide containing an amino acid sequence which is at least 70% identical to the amino acid sequence of SEQ ID NO : 2, the polypeptide having phosphoglycerate mutase activity,

c) a polynucleotide that is complementary to the polynucleotides of a), or b), and

d) a polynucleotide containing at least 15 consecutive bases of the polynucleotide sequence of a), b) or c), the polynucleotide encoding a polypeptide having phosphoglycerate mutase activity;

wherein the polynucleotide comprises the nucleic acid sequence as shown in SEQ ID NO : 1 and replicates in corynebacterial host cells.

6. (Amended) The polynucleotide that is DNA according to Claim 2 comprising:

(i) the nucleotide sequence shown in SEQ ID NO: 1, or

(ii) at least one sequence that is a degenerate variant of sequence (i) within the degeneracy of the genetic code], or

(iii) the nucleotide sequence shown in SEQ ID NO: 1 in which a sense mutation has been introduced, wherein the mutated nucleotide sequence encodes for a polypeptide having phosphoglycerate mutase activity.

7. (Amended) An isolated corynebacterial polynucleotide comprising a polynucleotide sequence selected from the group consisting of:

a) a polynucleotide that is at least 70% identical to a polynucleotide encoding a polypeptide containing the amino acid sequence of SEQ ID NO : 2, the polypeptide having phosphoglycerate mutase activity,

b) a polynucleotide encoding a polypeptide containing an amino acid sequence which is at least 70% identical to the amino acid sequence of SEQ ID NO : 2, the polypeptide having phosphoglycerate mutase activity,

c) a polynucleotide that is complementary to the polynucleotides of a), or b), and

d) a polynucleotide containing at least 15 consecutive bases of the polynucleotide sequence of a), b) or c), the polynucleotide encoding a polypeptide having phosphoglycerate mutase activity,

wherein the polynucleotide replicates in corynebacterial host cells and encodes a polypeptide comprising the amino acid sequence shown in SEQ ID NO : 2.

22. (Amended) A member of the Coryneform group of bacteria transformed by the introduction of the polynucleotide according to one of Claims 1 or 6.

23. (Amended) Bacteria transformed according to claim 22, wherein the bacteria are of the genus Corynebacterium.

Please add following new claims 24-26.

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cont'd

24. An isolated polynucleotide isolated from the species *Corynebacterium glutamicum* that hybridizes to the complement of SEQ ID NO: 1, wherein the isolated polynucleotide encodes a polypeptide having the enzymatic activity of phosphoglycerate mutase.

25. An isolated polynucleotide comprising at least 30 consecutive nucleotides of SEQ ID NO: 1 having the function of a primer in a polymerase chain reaction to produce a polynucleotide encoding a protein comprising the amino acid sequence of SEQ ID NO: 2.

26. An isolated polynucleotide comprising at least 30 consecutive nucleotides of the complement to SEQ ID NO: 1 having the function of a probe in a hybridization reaction to detect or to isolate a polynucleotide encoding a protein comprising the amino acid sequence of SEQ ID NO: 2.

IN THE ABSTRACT OF THE DISCLOSURE

Please delete the present Abstract of the Disclosure and replace it with the following new Abstract of the Disclosure.

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The invention provides nucleotides sequences encoding the gpm gene, which itself encodes phosphoglycerate mutase, and fermentation processes for the preparation of amino acids, especially L-lysine, using corynebacteria wherein the gpm gene is amplified.